

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A binder composition for an electrode for an electric double layer capacitor comprising a binder polymer and water, wherein said binder polymer comprises:

50 to 98% by mole of monomer units (a) derived from a compound represented by the following general formula:



wherein R^1 represents a hydrogen atom or an alkyl group, and R^2 represents an alkyl group having 2 to 18 carbon atoms or a cycloalkyl group having 3 to 18 carbon atoms,

1 to 30% by mole of monomer units (b) derived from an α,β -ethylenically unsaturated nitrile compound, and

0.1 to 10% by mole of monomer units (c) derived from ~~a multifunctional ethylenically unsaturated carboxylic acid ester~~ at least one selected from the group consisting of dimethacrylates, trimethacrylates, diacrylates and triacrylates; and
has a glass transition temperature from -80 to 0°C.

2. (Original) The binder composition for the electrode for the electric double layer capacitor according to claim 1, wherein the binder polymer further comprises 1 to 10% by mole of monomer units (d) derived from an ethylenically unsaturated carboxylic acid.

3. (Previously Presented) The binder composition for the electrode for the electric double layer capacitor according to claim 1, wherein the particle diameter of the binder polymer is from 50 to 1000 nm.

4. (Previously Presented) A slurry for an electrode for an electric double layer capacitor, comprising the binder composition for the electrode for the electric double layer capacitor as claimed in claim 1, and a carbonaceous material.

5. (Original) The slurry for the electrode for the electric double layer capacitor according to claim 4, wherein the carbonaceous material comprises active carbon having a specific surface area of 30 m² or more.

6. (Previously Presented) The slurry for the electrode for the electric double layer capacitor according to claim 4, further comprising a thickener.

7. (Previously Presented) A process for producing an electrode for an electric double layer capacitor, wherein the slurry for the electrode for the electric double layer capacitor as claimed in claim 4 is applied onto a current collector, and then dried.

8. (Original) The process for producing the electrode for the electric double layer capacitor according to claim 7, wherein the drying is performed at the temperature from 120 to 250°C.

9. (Original) An electrode for an electric double layer capacitor, wherein an electrode layer is bound onto a current collector, the electrode layer comprising a carbonaceous material and a binder polymer which comprises:

50 to 98% by mole of monomer units (a) derived from a compound represented by the following general formula:



wherein R^1 represents a hydrogen atom or an alkyl group, and R^2 represents an alkyl group having 2 to 18 carbon atoms or a cycloalkyl group having 3 to 18 carbon atoms,

1 to 30% by mole of monomer units (b) derived from an α,β -ethylenically unsaturated nitrile compound, and

0.1 to 10% by mole of monomer units (c) derived from a multifunctional ethylenically unsaturated carboxylic acid ester; and

has a glass transition temperature from -80 to 0°C.

10. (Previously Presented) The electrode for the electric double layer capacitor according to claim 9, wherein the binder polymer further comprises 1 to 10% by mole of monomer units (d) derived from an ethylenically unsaturated carboxylic acid.

11. (Previously Presented) An electric double layer capacitor having the electrode for the electric double layer capacitor as claimed in claim 9.

12. (New) The binder composition for an electrode according to claim 1, wherein the monomer unit (c) is polyethelene glycol dimethacrylate.

13. (New) An electric double layer capacitor comprising an electrode containing a binder composition comprising:

water; and

50 to 98% by mole of monomer units (a) derived from a compound represented by the following general formula:



wherein R^1 represents a hydrogen atom or an alkyl group, and R^2 represents an alkyl group having 2 to 18 carbon atoms or a cycloalkyl group having 3 to 18 carbon atoms,

1 to 30% by mole of monomer units (b) derived from an α,β -ethylenically unsaturated nitrile compound, and

0.1 to 10% by mole of monomer units (c) derived from at least one selected from the group consisting of dimethacrylates, trimethacrylates, diacrylates and triacrylates; wherein said binder composition has a glass transition temperature from -80 to 0°C.